DOCUMENT RESUME

ED 198 785 HE 013 699

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TITLE The Study of Sequen'ial Student Participation in University in a Changing Environment.
INSTITUTION Brandon Univ. (Manitoba).
PUB DATE 79
NOTE 58p.: Some pages may not reproduce clearly.

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Academic Aspiration: *Access to Education: *College Attendance: *College Bound Students: *College Choice: Commuting Students: Comparative Analysis: Decision Making: *Enrollment Influences: Financial Needs: Foreign Countries: Higher Education: High School Graduates: Institutional Research: Occupational Aspiration: Predictor Variables: Student Employment
IDENTIFIERS *Brandon University (Manitoba): Canada

ABSTRACT

The factors influencing attendance at Brandon University, Manitoba, Canada, by 1978 high school graduates were studied. Students who had participated in the Post-Secondary Demand and Enrollment Survey of November 1977 and had selected Brandon University as their first choice institution, and randomly selected students who had applied and been accepted by the university were studied. From these two samples, subgroups of students who subsequently attended the university (going) and who did not attend the university (not going) were compared. The study questionnaire attempted to determine the most important persons influencing the students' decisions to continue or not to continue higher education: events that occurred in high school and summer that might have some impact upon students' immediate plans in the fall; problem areas that students might encounter in their planning; and their educational objectives, career plans, and foreseeable obstacles in fulfilling their plans. Specific information was obtained on students' geographic origins, commuter status, summer employment, and degree of certainty as related to financing the first year of college and as related to achieving their aspirations. The dominant explanation for students not attending Brandon University focuses on insufficient funds. Among the factors that discriminated between the going and the not going groups were the following: preparation for a specific life style, teacher and parent influence, and ability to overcome problems. Recommendations to increase attendance are offered, including financial aid options and marketing efforts. (SW)

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THE STUDY OF SEQUENTIAL STUDENT PARTICIPATION IN UNIVERSITY IN A CHANGING ENVIRONMENT

by

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The Department of Education
The Universities Grants Commission

Manitoba

1979

I. METHODOLOGY

The methodology for this study required both general and specific developmental stages which reflect the environment in which it must operate. In the general stage a conceptual framework for the study was developed which identified pending problems for the university sector, the Universities Grants Commission, and the Department of Education. The broad goals of such a study were refined into operationalized objectives on which research could focus. The research outline was drafted and its strengths and limitations were given careful consideration. A contingency plan was prepared, should the first sample not provide sufficient responses. At this point exploration turned to the need for joint co-operation in undertaking the research and the joint utilization of funds and resources.

Having reached a satisfactory agreement on the general stages on the research design, the Universities Grants Commission voted funding and the Department of Education and Brandon University provided written statements supporting their resource commitments. Dr. Jack Lam was designated by President Perkins to assume directorship of the Brandon University-based and focused study. Dr. Ben Hoffman was designated Project Co-ordinator from his position with the Universities Grants Commission and the Department of Education.

A. Broad Objectives

The broad objectives of this study can be stated as follows:

To understand the circumstantial factors influencing individual

high school graduates of the class of 1978 to participate or not to participate in higher education at Brandon University.

B. Specific Objectives

Specific Objectives developed from this frame of reference were:

1. How had the events of the final high school year in Manitoba (1977-1978) and the summer months of 1978 related to one another and how had they influenced the students' decisions to go or not to go to Brandon University in the fall of 1978?
2. How do the going and not going student groupings differ in the present study and in historical comparison?
3. Which were the most important events and circumstances influencing the students' decisions on continuing their education at Brandon University?
4. To what extent had these events been forecast in the Post-Secondary Demand and Enrolment Survey of Sample I in November of 1977?
5. Based upon the findings of this study and a comparison with the historical series of student decision making, has a major shift in patterns and values, influences and impact events taken place in Manitoba?
6. What are the policy implications of these findings?
7. What recommendations appear from the findings as responsive to the problems faced by these students and future students seeking to fulfill their plans for a University education?

C. General Statistical Techniques

A multitude of statistical techniques would be employed in attempting to provide answers to the sub-questions raised. Correlational Analyses were used for finding the relative strengths of associations among the various circumstantial factors investigated; cross-tabulation and

χ^2 analyses were applied to detect areas of differences between "going" and "non-going" groups, and stepwise discriminant analysis was used to determine the relative importance of factors that differentiate the two categories of students.

D. Instrumentation and Its Conceptual Bases

A single questionnaire was designed for the present study. In order to provide some continuity with the past undertakings, the questionnaire inherited both in content and in format quite a few of the items developed and validated in the PDEM instrument.*

The first portion of the questionnaire attempted to probe among "significant others", the most important persons influencing the students' decision to continue or not to continue higher education. The second portion dealt with events that occurred in high school and summer that might have some impact upon students' immediate plans in the fall. The third portion examined the problem areas that students might encounter in mapping out their plans. The fourth section looked into their educational objectives, aspirations, career plans and foreseeable obstacles in fulfilling their plans.

In general, items in the questionnaire were accompanied each by a five-point scale. This structured pattern of responses was amplified in places by open-ended questions so that additional information to illuminate the observed responses could be obtained.

E. The Samples

Two sets of samples were involved in the present study. The first

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* The Post-Secondary Demand and Enrolment Models I and II were developed - applied and operationalized under the direction of Drs. T. Majors and D. Beckman. The questionnaire and most of its items have been applied on high school students from 1972 onward.

sample which constituted the initial target group were Grade XII students who had participated in the Post-Secondary Demand and Enrolment Survey of November 1977 and had selected Brandon University as their first choice institution. The second sample was randomly selected from students in the class of 1978 who had applied and had been accepted by Brandon University.** Subsequent response rates of the two groups were compiled (Table IV) and pooled for the final analysis.

From these two samples, two categories of students were identified, "Going" and "Not Going". In subsequent sections of analysis, "going" refer to all those who had been selected from both Sample I and II who were now attending Brandon University. The "Not Going" group refers to those chosen from Samples I and II who did not study in the said institution.

It should be stressed that while the inclusion of the second sample limited to some extent historical inferences that were to be attempted, the measure taken was in line with the broad objectives described earlier. In addition, such an inclusion had not challenged the assumptions under which specified statistical techniques would be employed.

II. FINDINGS

A. Historical and Geographic Patterns

To what extent do the sequential student participation rates reflect much broader historical and geographic patterns? What are some of these patterns and how do they appear to be changing and influencing the sequential student decision making?

A substantial strength of this study is found in its linkage to an extensive data base of sequential student decisions on Post-Secondary education dating from 1972 to 1978 (The Post-Secondary Demand and Enrol-

** The second sample was developed to increase the "going" and "not going" sub groups.

ment Data Base). During this period over twelve thousand students were surveyed and responded to many of the same questions posed for the sequential students in this study. (Samples I and II). The linkage to the data base is direct in the case of the sixty-eight students in Sample I. Sample I was selected from the Class of 1978 based on their participation in a November 1977 survey and their selection of Brandon University as their first choice institution.

The researchers of the historical and geographic patterns were offered a wide array of circumstances, events and influences which could be explored. In this report a very selective presentation has focused on those areas which appear most significant: geographic origins, commuter status, summer employment and levels of uncertainty.

(i) Geographic Origins

The geographic origins of Brandon University students for the past five years (1973-1978) are disclosed in the bar chart Map 1: Brandon University: Last High School Attended by Enrolled Students. With the exception of the Winnipeg bar, it would appear that Brandon University has provided educational services to its region which reflect geographic distance and the locations of other universities. When it is realized that the Winnipeg region contains over half of the Manitoba population (594,000) the size of Winnipeg's contribution is modest compared to the City of Brandon with a population of only 36,711.

(ii) Origins of Sample I

The origins of Sample I, sixty-eight students with Brandon University as their first choice, are presented in Table IV. It is apparent at once that the student contribution of the Winnipeg population base has declined. In addition to the dominant position of the Southwest region

with the location of the city of Brandon and the University, the North, Parklands, South Central and North Central appear as the origins of sequential enrolments based upon student choice.

(iii) Commuter Status

Brandon University like its sister institutions is located in an urban centre. However, the size of the urban centres relates directly to the numbers of sequential students graduating from local high schools and the need to be non-commuters. Table IV discloses the regional concentrations of population and the favourable population base and location of the University of Manitoba and the University of Winnipeg. Approximately half (49.9% and 50.9%) of the above institutions sequential demand would be able to live at home and commute. In sharp contrast, the Southwest regional population base is not just the City of Brandon but include a substantial geographic expanse beyond commuting range. Actual enrolments indicate that non-commuting students at Brandon University represent over eighty-two percent of their full-time sequential.

(iv) Finances and Commuting

The substantial benefit in the form of "Parental Aid - Room and Board" is disclosed in Table V, Major Sources of Financing First Year of Post-Secondary Education by Geo-code Region. Parental aid in the form of room and board assumed an importance to sequential students second only to summer employment as a source of financing. Historically and geographically, the opportunities of producing a workable Post-Secondary budget are weighted heavily in favour of the sequential student who can live-at-home and commute. The current value of this parental aid is placed at $1,023. per University year for students living-at-home and $2,013 for non-commuters

(Student Aid Branch, Department of Education, Manitoba).

The longitudinal study of High School Outcomes utilized the historical data base to follow up three thousand of the sequential students from 1972 to 1977. In retrospect, these students placed parental aid, including room and board, as their number one financial source for Post-Secondary education. Student Aid data added further insight into the proportions of first year students facing the additional costs of a non-commuter (about $1,000) as 82.4% at Brandon University and 54.5% at Winnipeg based universities. It is evident that the non-commuter students face a substantial financial burden, and that many more Brandon University students and their families must provide this additional funding than students at Winnipeg-based institutions.

(v) Summer Employment

The sequential student in Manitoba faces a difficult job market in the summer of his year of graduation. These students find themselves arriving on the labour market in mid June when farm planting is usually completed and when University and Community College students have been looking for jobs since early May. Not only are there fewer jobs (often the least desired) to be had, but the time to earn funds for University has been cut shorter than at any time in the students' Post-Secondary process.

Sequential students have historically looked upon summer jobs as their major source of financing for first year University. Table V discloses the geocode regions and how geography and urban-rural locations appear to influence funding sources. A special computer run of the historical data base focused on longitudinal outcomes from 1972 to 1977 disclosed a substantial weighting in summer job opportunities and outcomes

towards urban centres of Manitoba for the sequential students.

One of the hypotheses to be tested by this study will be the impact of the absence of summer jobs on this very critical sequential articulation. If these late arrivals in the summer labour market find the local jobs are gone, how will this change enrolments?

(vi) Levels of Certainty

Two measures of certainty have been applied historically and geographically, they are: Certainty as related to the financing of the first year of Post-Secondary and certainty as related to validated outcomes of the "Going University" grouping. In Table VI the reader can inspect the levels of Certainty of Financing. It is observed that students from the Winnipeg region are markedly more "very certain" and markedly less "not certain at all" than students originating in the five geocode regions served by Brandon University.

The "Going University" group is a name given the group with the highest probability of fulfilling their plans. This "Going University" group was identified in the early years of the Post-Secondary Demand and Enrolment Models and their findings validated in 1974 and 1979. In terms of "certainty" to fulfill plans about seventy percent of this group did so sequentially and ninety-four per cent eventually.

Historically and geographically the "Going University" group in Table VII is proportionally a larger part of the Grade Twelve classes in urban centres than in rural areas (31% to 14%). The very fact that Brandon University must draw much of its future sequential students from rural areas where there are fewer "Going University" students is a point for serious consideration. The point for further deep concern in this study is the apparent shift in the certainty of the "Going University" group it-

self, regarding selection of Brandon University as their first choice.*** If this shift has occurred and if it continues in future years, the consequences could be very serious.

B. Areas of Difference Between Groups

The Chi-square Analyses were utilized to identify the areas of difference between the "going and "not going" groups who enrolled at Brandon University in the Fall of 1978. So as to discriminate areas of social, economic or political importance the size and percentages of the groups were examined even though they did not attain statistical significance.

(i) Final Decision

Clearly the most important finding in this level of analysis was the shift in institutional choice by students not attending Brandon University. The majority of the not attending group (62.2%) were found to be attending institutions located in Winnipeg (mainly the University of Manitoba). In Table VIII the reader can observe that another sizeable group of the "not going" group (32.4%) are employed.

(ii) Educational Aspirations

In Table IX the educational aspirations of the "going" and "not going" groups were compared and were found to be significant at the 0.05 level. Based upon the findings of the previous section (Final Decision) and a study of the Data Base on Manitoba High School Graduates of 1972, 1973 and 1974 by Dr. Dale Beckman, the scaling down of aspirations is consistent with the outcomes of high school graduates who go into the labour force following graduation.

*** The finding disclosed that many of the "Going University" - Brandon University first choice had shifted their choice to Winnipeg-based universities.

(iii) Program Problems

The Chi-square analysis of these data disclose no significant differences between the two groups. However, there were some program problems that require close scrutiny.

Individuals in both sample groups were asked to respond to the question: Did you experience any problems in fulfilling your Post-Secondary plans in getting the program of study desired?

Answers allowed a choice from 1, which indicated no problems, to 5, disclosing a "major problem". Thirteen or 19.1% of the total respondents selected number 5, indicating they had encountered a major problem. The nature of these problems were as follows (in order of importance):

a) Another university had a better course selection
b) Lack of desired vocational program
c) Undecided as to what program to take
d) Insufficient funds to take program desired.

If these were, indeed, major problems for prospective students to Brandon University, it is expected that their impact on student outcomes would be substantial. Findings support this hypothesis, with nine out of thirteen or 69.2% of the major program problem failing to enroll at Brandon University. Further examination of these no-show students disclosed that two-thirds (6) had terminated their continuous education for the present, and one third (3) had enrolled at other institutions (University of Manitoba and a community college).

(iv) Financial Problems

(1) Summer Activities

The summer months of 1978 represented the final opportunity for many students of the class of '78 to earn money for university expenses. Item

one in Table X reveals the high importance given to finding a full-time summer job by most students (51.9% "going" group, 59.5 "not going" group). Item number two recognizes the purpose of the summer job "to save for future plans" which is assumed to be higher education.

(2) Personal Savings

The wording of the personal savings question focused on the money available at the time of graduation from high school excluding the summer earnings of 1978. Just over half (50.9%) of the students who viewed their level of personal savings as 'somewhat' or a 'major' problem enrolled at Brandon University in the Fall of 1978. This finding suggests that most of these students found a solution to their problem which supported their Brandon University selection. It would be interesting to compare solutions in terms of institutional choice stability.

(3) Student Aid

In Table XI it is observed that about twice as many "not going" vs. "going" students had experienced 'some' to 'major' problems over student aid (22.8% to 12.3%). That the majority of both groups did not encounter problems over student aid must be taken in context of a three-year decline in student applications which clearly indicates that many who experienced little problem had really no experience whatsoever in applying for the loans. The new regulations concerning the eligibility in many cases discourage application.

(4) Family Support

The Chi-Square Analyses of the two groups disclosed that significant differences existed in the area of family support. In Table XII, students in the "going" group encountered 'some to major' problems of family sup-

port 18.5%, to a "not going" group problem of 29.7%. As indicated in the Historical Geographical section most Brandon University students must live away from home and in doing so pay an additional $1000 per academic year. The finding from the Chi-square Analysis support the financial burden hypothesis and its impact on Brandon University sequential enrolments.

C. Significant Events

How did the events and circumstances prior to the students' final decision on attending Brandon University come together to influence their outcomes? This critical question has been explored using Correlation Analysis appearing in Table XIII. Two perspectives are available for significant relationships to thirty-four variables: Reasons for not attending Brandon University (Group A) Reasons for attending (Group B).

(i) Reasons for not Attending Brandon University

The not attending Group A, identified seven reasons for not enrolling at Brandon University. An interpretation of each of these reasons follows:

(1) Insufficient money was the strongest relationship observed for the "not going" group and was directly linked to the final decision on attending. This financial squeeze also appears to associate with considerable indecision as to what program and what institution to attend and difficulty in obtaining summer and part-time employment. Some sequential students appear to have projected their frustration in the summer job market to an assumed high level of University graduate unemployment and a negative campus environment.

(2) "Undecided what program to take" response was strongly linked to "too high unemployment rate of university graduates" and examination of "career hoped to obtain" and the "date to attend Brandon University."

The interpretation of these relationships suggest the student has entered a period of uncertainty - indecision regarding his or her future career, the possible delayed entry to Brandon University. An additional correlation to "poor" atmosphere at Brandon University may indicate the students' personal preparation for a decision not to attend.

(3) "Desire for a Vocational Program at Community College" was positively correlated with "tired of school" and "strongest influencing person on immediate plans".

(4) "Winnipeg and Other Universities had a Better Course Selection" was linked to the student "high level of education they hoped to achieve." Additional information received by the student supported a change in institutional choice based upon a wider array of course selections. What were these wider course offerings? Research should attempt to identify these courses. In terms of institutional choices many of these students appear to have selected the University of Manitoba and a few the University of Winnipeg.

(5) "Tired of School" was significantly correlated to the "experience which most impacted or could have changed future plans" (.25). This finding strongly suggests a high school origin and discouragement in the final year which resulted in a change in goals to personal and vocational interests and a rejection of University level achievements. Perhaps research should attempt to identify the type of school experience or personal experience which produces this rejection. "Tired of school" reactions were correlated with the "experience which most impacted or could have changed the students' future plans".

(6) "Too High Unemployment Rate of University Graduates" was re-

interpreted by the students as a reflection of their "most difficult problem area".

(7) The "Poor Atmosphere at Brandon University" was linked strongest to the assumed "too high unemployment rate of University graduates" and then to "insufficient money" and "tired of school".

Interpretation

The dominant explanation for students not attending Brandon University focuses on insufficient funds apparently resulting from the absence of employment opportunities during the summer of 1978 prior to Fall registration. The spin-offs of this dominant environmental fact were personal indecision, transferen and sense of tiredness (fatalism) and negative views of Brandon University.

There are also indications that experiences in the final grade twelve school year may have been a major factor in the final decision. Influences by teachers, peers and parents may have combined with an excessive work load and low grades to produce the response "tired of school".

Influence during the final school year may have produced the impression that Brandon University did not offer adequate preparation for higher levels of education and professional outcomes. The source of this information is unclear. However, many students have received this impression and altered their institutional choice.

Finally, employment prospects for Brandon University graduates was not known to the class of 1978 (The Brandon University Study of Outcomes was not completed until June 1979). Unemployed high school graduates trying to save money for University by the Fall of 1978 faced a personally traumatic experience. Many of these would-be students developed indecision as to what directions they should take, negative views towards the blocked

opportunities and a transference of their unemployment status to a similar assumed outcome for University graduates.

Reasons for Attending Brandon University

The group attending Brandon University (Group B) identified six reasons for their decision: Brandon University is closer to home and cheaper, Brandon University is a smaller university, the institution offers the desired programs, it has a more friendly atmosphere, Brandon University has better student-faculty relationships, and finally, the influences of teachers, parents and friends to attend.

Interpretations

The group attending Brandon University was a smaller and more select group from the overall study sample. Of the students who had a first choice of Brandon University in November of 1977 only about nineteen percent actually enrolled in the Fall of 1978. Of the students who applied and were admitted to Brandon University from the Class of 1978, just twenty-five percent of this sample enrolled in the fall.

This rather high selectivity of only one in four or five discloses the characteristics markedly different from the "not attending" group in the following areas:

1. The group attending Brandon University is very positively oriented towards the University and this is in sharp contrast to the "not going" students.

2. The "going" group either did not encounter problems or was able to overcome their constraints with alternate resources.

3. As a result of a favourable transition from high school to University, the attending group has avoided most sources of frustration, indecision and negativism. The group is confident of the values of the

University and this confidence is shared by their parents, friends and teachers.

4. Many of the going students indicated a desire for the attributes of Brandon University because they support their education goal to prepare for participation in social, political and cultural life.

5. The student/faculty relationship was viewed by many going students as most attractive and linked to many other positive attributes of Brandon University such as size, friendly atmosphere and closeness to home and cheaper.

D. The Most Important Factors

What were the most important factors that discriminate those who attended Brandon University from those who did not? A Stepwise Discriminant Analysis was applied to the data from the survey and a significance of 0.05 or better was again required. Findings in order of their importance appear in Table XIV.

A brief description will identify the "most important factors" already emerging in the Chi-Square and Correlation analysis. When a "most important factor" emerges for the first time, or a factor shifts significantly, the treatment will be expanded appropriately.

1. Preparation for Specific Life Style

The students' orientation towards specific life styles has long been recognized as a critical factor separating the going students from the not going on to university. Those who belong to the "not going" group have a stronger desire to pursue an independent livelihood. Often, further education becomes an intolerable delay to their immediate expectations.

The university-going student must often forego personal satisfac-

tion, financial independence and freedom from parental directions to achieve his or her post-secondary objectives. The historical data base on sequential student decisions in Manitoba has been aware of "life style" orientation and its importance since the first studies in 1972. Clearly, this remains the most important single factor affecting sequential enrolments!

2. Teachers' Influence

One of the most dramatic shifts from the past appeared with the emerging dominance of the high school teacher's influence on the outcomes of the class of 1978.

Table XIV discloses the November 1977 position of the teacher as a minor influence on the student's plans. A year later the same students (Sample I) reported their grade twelve teachers had had a dominant two-fold influence — encouraging some and discouraging others to attend Brandon University.

3. Influence of Parents

From the very first studies of sequential student decision making the parents were identified as the single most dominant influence on the "going" and "not going" students. The correlation analysis indicated a shift in some of the parents' positions. The analysis found many parents supporting vocational-community college options despite their children's desire to attend university. Perhaps this division between some parents and their off-spring has allowed the teachers to move into the dominant influence role.

4. Ability to Overcome Problems

Those students who overcome the problems related to their university plans, typically, appear in the "going" group. Those who fail to

find solutions, fail to fulfill their educational plans. This finding indicates substantial problems, often of a financial nature, which denied students access of Brandon University in the Fall of 1978.

Future enrolment at Brandon University, as revealed by the findings, hinges upon the degree of financial problems encountered by the student rather than the student's expressed choice.

5. Influence of Friends' Plans

The influence of friends' planning is focused mainly on the "not going" group. These findings also reflect the PDEM findings of the earlier periods.

6. Personal Development

Data suggests that those who were in the "going" category placed greater emphasis upon development of personal interests, aptitudes and talent than those who are in the "not going" group. Perhaps this is another area other than "new lifestyle" that reflects differences of values cherished by the two groups.

7. Seriousness of Attending Post-Secondary

The PDEM developed seven areas into what the researchers called a "motivation index". The most highly motivated were described as "going to university" and historically 94% were able to fulfill this intention. The reader will recall the composition of the sub-sample drawn from PDEM. The group going on to Brandon University were dominated by this PDEM "going to university" designated respondent. With the sample so oriented, the emergence of "Seriousness" is to be expected.

8. Problem of Selecting the Desired Program of Study

This factor on the surface appears to suggest closed, or otherwise constrained enrolments in some Brandon University programs. Investigation

and further in-depth research disclosed this was not the proper interpretation. (All programs at Brandon University were open in the Fall of 1978).

A somewhat complex interaction of factors account for this factor as follows: Often a major unsolved problem blocks the student's plans (usually the absence of employment and insufficient funds). This factor interacts on the student's plans to produce uncertainty - and an exploration of other institutions (typically in Winnipeg or at community colleges with lower tuition and shorter programs). A shift toward vocational programs reflects both the student's employment-financial plight and, often, parental influence. Needless to say, Brandon University did not appear to have a program to answer the needs of these students. However, the General Studies Program and its cooperative link to the community college appears to offer wide flexibility.

9. Problems in Fulfilling Post-Secondary Plans

Understandably, "not going" groups perceived the problem far more seriously than those who had already attended the University. Other than the actual obstacles the former group ran into, one suspects that self-projected images of defeat accounted a great deal for those who did not undertake further studies. This type of mentality further substantiates the more tangible factors to distinguish the two groups.

10. High School Counsellors' Influence

The historical data base provides a record of the influence of Secondary School Counsellors from 1972 to November 1977 (see Table XVI).

The emergence of the School Counsellor as a significant influence in this analysis is worth further research and explanation. Is this finding a reflection of declining parental influence? Is it a realization of

the final impact of the counsellor and counsellor information on the student's decision to "go" or "not to go"? Should policy focus on the Counsellor or the grade twelve teacher or both?

11. Problem of Personal Savings is another factor segregating the "going" from the "not going" group. Evidently, as revealed in the previous analysis, the "going" group demonstrated far less problem of having sufficient personal savings to meet the higher education expenses than the "not going" group. This compounds other problems they confront in going to the University.

12. Leadership Skills Development for Community Affairs

The "not going" group considered this goal as far less important than the "going" group. As reflected in another part of the analysis, the very pragmatic characteristic of "new lifestyle" professed by the "not going" group seeking immediate gratification of financial independence tends to dampen their desire for the less tangible and more intrinsic reward of leadership skill development which receives greater emphasis at the institution of higher learning.

13. Sports/Athletic Involvement

There were noticeable differences between the two groups in terms of Sports Involvement. Those who did not go on seemed to be more heavily involved than those who did. Probably, excellence in this aspect lends the students readily to a professional career in sports than those who were not.

14. Educational Aspirations

This is an expected factor to discriminate the two groups. One should bear in mind, however, that as many students of the "not going" group are involuntary in their decision of not pursuing further study, then the expressed educational level they hoped to achieve had been tailored by the reality of problems they confronted at the present time. Given chances in

future, such momentary adjustment of expectation might be revised once again.

15. Accepted at Desired University or College

In view of the fact that some students in the "not going" category ended up in other universities and in light of the comments they made about problems of finding appropriate programs at Brandon University, one could safely conclude that those in the "going" group must have found their desired program and had been accepted at Brandon University whereas some of the "not going" group had not.

16. Intellectual Development

That the "intellectual development" should be a discriminating factor for the two groups is consistent with the previous findings. More students in the "going" group than those in the "not going" group rated the intellectual development as an important goal for their future. To the latter, tangible goals like "preparation for immediate employment" and "discovery of vocational interests" are far more relevant and therefore far more important than the global goal of "intellectual development".

17 & 18. Parental or Other Family Aid and "convenient housing with family" can be grouped together for discussion, as both of them are related closely to the financial problems prospective university students face. The presence of family aid of one type or another and the convenience of accommodation with family understandably reduced projected financial needs to meet further education and compensate for inadequate personal savings in many cases.

19. Numbers of Problems in Obtaining Goals

From the response rate, those in the "not going" group indicated far more problems than those in the "going" one. While this may be a reflection

of the amount of obstacles that the "not going" group had failed to overcome, one could also detect that this group tried to rationalize their decision for not attending further education.

III. LIMITATIONS

The many strengths of this sequential student study should be obvious to the reader who has reached this point in the report. The historical data base, unequaled in North America; the direct linkage of Sample I to this data and their answers in an earlier survey in November 1977; the compatibility of the questionnaire and methodology to the historical series; the introduction of multiple statistical approaches, and the utilization of second stage research to respond to findings, are only some of the notable strengths of this study. It is appropriate now to recognize the following limitations of this study:

A. Sample Size

At the outset of this project a feasibility study indicated that even if all sixty-eight students in Sample I (directly linked to Brandon University first choice and the historical data base) responded, the sample size would place a limitation on sub-group analysis. Therefore, a second sample, Sample II of the Class of 1978, was developed to respond to the original questionnaire. Sample II respondents had made application and had been accepted to Brandon University. While the Sample II provided the numbers required to give confidence to the sub-group findings, there is a definite limitation when inferences are to be made about their degree of commitment (Sample II does not have a historical record of first choice Brandon University).

B. Historical Series

To expand the sample size as discussed in A above, involved a trade-off and the loss of a clear indication of longer term change for Sample II participants. While this limitation is compensated for in the Historical

and Geographic Patterns and other special computer runs for the entire class of 1978, the absence of a "pre" or before decision response is a constraint on inferences of changes.

C. Economic Conditions and Employment Options

Many of the "not going" and some of the "going" students in Samples I and II identified the general economic conditions, problems of finances and their difficulties in finding employment as critical problems blocking their Post-Secondary plans. It would appear from these responses that students originating in the rural regions served by Brandon University and those from the City of Brandon faced a critical shortage of summer jobs and part-time employment during the academic year, if they had enrolled at Brandon University. The historical data base and the Study of High School Outcomes linked to this data base confirm a longitudinal shortage of sequential student employment from 1972 to 1977 in these areas and in the outside of Winnipeg region generally. The conditions during the summer of 1978 could not be determined from independent sources such as Manpower or Student Aid. The absence of such an independent assessment of employment opportunities must be viewed as a limitation, not only of this study, but for the decision makers of Manitoba generally.

IV. CONCLUSIONS AND RECOMMENDATIONS

The Student Market Inequities

Brandon University services a student market in Manitoba which is significantly different in degree from the Winnipeg-based universities. These differences will place Brandon University at a marked disadvantage in the 1980's as its ability to secure and hold sequential student enrolments change. Three broad areas of student market differences are as follows:

1. Size of the "Going University" Group

Much attention has been focused on the declining size of high school graduating classes starting in the early 1980's and continuing to the 1990's. Size alone is only part of the potential sequential enrolment picture. Participation rates are the other part and could be more a determinate of the future than head count of high school graduates. For example, Winnipeg-based universities service a large Winnipeg population which has a "going University" record from 1972 to 1977 of 31% of the high school class. In sharp contrast Brandon University services a region with a "going University" record of 14%. In effect, Brandon University must work harder with a larger number of students for each enrolment realized.

2. Non-Commuting Impact

Due to the wide geographic spread of population serviced by Brandon University approximately 82% must live away from home. The Winnipeg-based universities have a sequential enrolment with only about half living away from home. Non-Commuting has a clearly established cost according to the Student Aid Branch of the Department of Education and it approaches $1,000 per academic year.

3. Employment Opportunities

There is considerable historical evidence, including the student responses from this study, which strongly supports a shortage of job opportunities in the area serviced by Brandon University. Most critical are the absence of summer jobs for sequential students which they perceive as their main source of financing Post-Secondary. Also important are part-time jobs which appear more abundant in Winnipeg during the academic year.

Student market inequities generally appear as long standing historical trends which may respond slowly to the intervention policy. Indeed, it may even be argued that all three items are beyond the control of a single institution.

Recommendations

The following recommendations appear as the most likely of producing desired changes:

1. Students and families facing the $1,000 additional financial burden of Brandon University, might be compensated in a number of ways:

a) Summer Job Preference
b) Part-time Academic Year Employment
c) Tuition Adjustments
d) Co-operative Housing
e) Co-operative Food Production
f) Family Contributions in Farm Products
g) Exchange Housing Between Winnipeg and the City of Brandon.

2. In light of the declining size of high school graduating classes, Brandon University will have to work harder to gain a larger share of the "going University" market. Efforts in the Winnipeg high schools might be worth exploration due to their higher participation rates.

3. Great care should be exercised to assist students in a smooth articulation from high school to Brandon University. Not only should this policy avoid the high losses of first choice Brandon University students, but the highly negative reactions of disappointed students can be avoided.

4. By working through high school teachers (particularly grade twelve teachers) the opportunities of Brandon University should be communicated, and assistance given to students facing problems. At the same time, identification of teachers who are discouraging attendance appears essential, and better relations established when or where possible.

5. The continuing importance of the students' "life style" requires attention, particularly when the "life style" is running for personal independence in otherwise highly intelligent and fully qualified students. The student aid determinations of dependence on parents and the rejection of personal items such as a car reflect middle class values. Perhaps, there are ways of avoiding the forced choice between acceptance of foreign values as the price for education which is derived from public taxation of all. Perhaps jobs, not aid, represents an answer acceptable to all parties.

6. Findings suggest that many eligible female students from rural high schools have not been able to find jobs or to gain financial support from their families which they or student aid might have expected. The values system to forego female higher education should be examined first in light of the impact of inflation on family disposable income and second in terms of the benefits of outcomes to the female university graduate herself and to society. Some outcomes findings support a very marked income benefit to female graduates over non-graduates.

7. Long term benefits of University graduates of Brandon University need to be developed to offset the negative impressions of the media. This recommendation has been implemented prior to the completion of this study.

8. Findings disclose that many "going University" students have become uncertain of their plans due to financial problems, job prospects and questionable program outcomes. These circumstances suggest the following:

a) Forecasting models such as PDEM - II may be subject to higher error than previously experienced.

b) Public relations for the positive and against the negative areas of uncertainty should be considered for University policy applications.

c) Students who have foregone their sequential entry to Brandon University should be a target group for PR directed at negative scaling down original educational plans and enrolment at a later date.

9. Traditional attitudes of older faculty at Brandon University may reject the idea of a student who is a "junior member of the institution". However, the golden days or perceptions of a yesterday when the students were little more than "fodder for the digestive mechanism of the University"* need careful reconsideration. Even the idea that a university should not stoop to recruit must be re-examined in the light of Brandon University's comparatively poor market position.

10. There is an obvious need in the Manitoba environment to identify the Post-Secondary plans, circumstances, needs and problems of the total

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*Dr. W. M. Sibley, Chairman, Saskatchewan Universities Grants Commission address to University of Manitoba. Free Press, March 22, 1979.

grade twelve population, if Brandon University is to identify its potential market and set in motion the communications needed to achieve successful articulation. Such a total population assessment has been recommended and funded by the Universities Grants Commission at its July 4th meeting. Institutions desiring names, addresses, institutional choices, and assessment of possible needs and problem areas may expect these later this fall.

SAMPLE I

TABLE I

SAMPLE OF HIGH SCHOOL STUDENTS WHO HAD BRANDON UNIVERSITY - FIRST CHOICE (In PDEM II Grade 12 Survey October, 1977)[1]

(Expressed as a Percent of Total Sample)

PDEM II Evaluation Status[1]	Enrolled at Brandon U.		Did Not Enroll at Brandon U.		Non Respondences		Total Sample	
	%	No.	%	No.	%	No.	%	No.
Going University	13.2	(9)	10.3	(7)	13.2	(9)	36.8	(25)
Going Impacted	2.9	(2)	13.2	(9)	11.8	(8)	27.9	(19)
Undecided	2.9	(2)	14.7	(10)	7.4	(5)	25.0	(17)
Not Going	-	-	1.5	(1)	4.4	(3)	5.9	(4)
Others	-	-			4.4	(3)	4.4	(3)
TOTAL	19.0%	(13)	39.7%	(27)	41.2	(28)	100.0%	(68)

[1] The PDEM II status evaluation was developed over 1971 to 1979 Research Development and Operational applications and validations. The multi year validation, just completed, disclose that 94% of the Going University go on to some post-secondary.

SAMPLE I

TABLE II

SAMPLE OF HIGH SCHOOL STUDENTS WHO HAD BRANDON UNIVERSITY - FIRST CHOICE (In PDEM II Grade 12 Survey October, 1977)[1]

(Expressed as a Percent of Each Status Group)

PDEM II Evaluation Status[1]	Enrolled at Brandon U.		Did Not Enroll at Brandon U.		Non Respondences		Total Sample	
	%	No.	%	No.	%	No.	%	No.
Going University	36	(9)	28	(7)	36	(9)	100	(25)
Going Impacted	10.5	(2)	47.4	(9)	42.0	(8)	100	(19)
Undecided	11.8	(2)	58.8	(10)	29.4	(5)	100	(17)
Not Going	-	-	25	(1)	75	(3)	100	(4)
Others	-	-	-	-	100	(3)	100	(3)
TOTAL	19.0%	(13)	39.7%	(27)	41.2%	(28)	100	(68)

[1] The PDEM II status evaluation was developed over 1971 to 1979 Research Development and Operational applications and validations. The multi year validation, just completed, disclose that 94% of the Going University eventually go on to some post-secondary.

SAMPLE I AND II

TABLE III

TOTAL SAMPLES OF HIGH SCHOOL STUDENTS (GRADUATING CLASS OF 1978) WHO EXPRESSED AN INTEREST IN ENROLLING AT BRANDON UNIVERSITY FALL 1978

	Enrolled at Brandon U.		Did Not Enroll at Brandon U.		Non Respondences		Total Samples	
	%	No.	%	No.	%	No.	%	No.
Sample I (PDEM-II)	12.0	(13)	25.0	(27)	25.9	(28)	62.9	(68)
Sample II Applied and Admitted	13.0	(14)	10.2	(11)	13.9	(15)	37.1	(40)
TOTALS	25.0%	(27)	35.2%	(38)	39.8%	(43)	100.0%	(108)

SAMPLE I

TABLE IV

CLASS OF 1978: FIRST CHOICE INSTITUTIONS
BY GEOCODE REGION OF HIGH SCHOOL
(In Percentage)

First Choice Institution	Geocode Region								
	Winnipeg	Southeast	North Central	South Central	Interlake	Southwest	Parklands	North	Province
Brandon University (N=68)	5.9*	1.5	10.4	13.2	1.5	38.2	13.2	16.2	4.1

* Compared with those who had selected University of Manitoba, it was 49.9% and with those who selected University of Winnipeg, it was 50.9%.

TABLE V

MAJOR SOURCES OF FINANCING FIRST YEAR OF POST-SECONDARY EDUCATION
BY GEOCODE REGION

Geocode Region	Personal Savings	Parental Aid - Room and Board	Parental Aid - Money	Government Student Aid	Other Scholarships	Summer Employment	Part-Time Job	Full-Time Job	Spouse Working	Other Financial Aid
				(in percentage)						
Winnipeg	27.6	45.5	20.2	16.2	11.3	49.7	27.1	8.2	3.4	8.6
Southeast	27.3	23.7	18.6	30.3	13.1	43.4	22.2	9.1	5.1	7.6
North Central	29.6	13.3	24.8	24.8	17.5	43.5	20.0	7.1	5.4	11.3
South Central	19.0	15.5	19.0	27.8	12.7	43.0	18.7	10.9	7.9	16.4
Interlake	39.1	21.0	26.2	15.7	6.7	56.5	30.3	13.2	2.9	3.8
Southwest	25.2	17.6	34.9	28.1	11.8	52.9	21.7	8.8	5.2	9.8
Parklands	28.1	10.8	23.6	37.5	17.3	44.7	19.2	8.4	4.2	8.1
North	25.2	23.1	22.1	24.2	16.5	47.8	27.1	9.9	4.7	11.3
Province	27.2	28.3	23.2	23.3	12.8	48.4	24.2	9.0	4.5	9.5

TABLE VI

CERTAINTY OF FINANCING FIRST YEAR OF POST-SECONDARY EDUCATION BY GEOCODE REGION
(In Percentage)

Geocode Region	Very Certain	Certain	Somewhat Certain	Not Certain At All
Winnipeg	45.5**	31.6	17.2	5.7**
Southeast	29.6	28.6	26.5	15.3
North Central	33.3*	28.1	28.9	9.6*
South Central	28.7*	25.5	30.6	15.3*
Interlake	23.1	33.3	29.6	13.9
Southwest	31.4*	33.6	24.7	10.3*
Parklands	30.4*	31.0	21.6	17.0*
North	24.8*	32.8	29.9	12.4*
Province	35.4	31.0	23.2	10.4

* Brandon University Service Region

** Winnipeg University Population Basis

TABLE VII

SAMPLE DISTRIBUTION BY DECISION GROUPS

	Going University		Going Community College		Going Other		Going Impacted		Undecided		Not Going		Other Plans		N/A	
	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Urban	31	(384)	8	(104)	10	(122)	22	(267)	13	(163)	12	(153)	2	(28)	2	(22)
Rural	14	(241)	7	(121)	11	(190)	23	(386)	20	(337)	18	(311)	3	(40)	4	(59)

TABLE VIII

FINAL DECISION OF HIGH SCHOOL GRADUATES 1978 WITH INTEREST IN ENROLLING AT BRANDON UNIVERSITY

	FINAL DECISION	ATTENDING BRANDON UNIVERSITY	DID NOT ATTEND
1.	Further Education	100%	62.2%
2.	Employment	-	32.4%
3.	Marriage	-	2.7%
4.	Other	-	2.7%
TOTAL		100%	100.0%

TABLE IX

EDUCATIONAL ASPIRATIONS: HIGHEST LEVEL
(In Percentage)

Highest Level of Education	Attended Brandon U.	Did Not Attend
High School	0	2.
Community College	3	35.1
University	51.9	37.8
Graduate-Professional School	40.	21.6
Others	5.1	3.5
	~~97.9~~ 100.0	100.0

TABLE X

ACTIVITIES OF SUMMER MONTHS 1978

(In Percentage)

ACTIVITIES - SUMMER MONTHS	ATTENDING BRANDON UNIVERSITY			NOT ATTENDING		
	UNIMPORTANT	SOMEWHAT	IMPORTANT	UNIMPORTANT	SOMEWHAT	IMPORTANT
1. Ability to Find Full-Time Employment	25.9	22.2	51.9	27.0	10.8	59.5
2. Ability to Save for Future Plans	37.0	25.9	37.0	35.1	10.8	48.0

TABLE XI

GOVERNMENT STUDENT AID

DESCRIPTION	Enrolled at B. U.		Did Not Enroll		Totals	
	%	No.	%	No.	%	No.
No Problem	36.8	(21)	28.1	(16)	64.9	(37)
Somewhat of A Problem	3.5	(2)	7.0	(4)	10.5	(6)
Major Problem	8.8	(5)	15.8	(9)	24.6	(14)
Totals	49.1%	(28)	50.9%	(29)	100.0%	(57)

TABLE XII

PROBLEMS WITH FAMILY FINANCIAL SUPPORT*

(In Percentage)

DEGREE OF PROBLEM	ATTENDING BRANDON UNIVERSITY	DID NOT ATTEND
Not a Problem	81.5	51.4
Somewhat of a Problem	7.4	24.3
Major Problem	11.1	5.4

* Chi-Square significant at 0.05 level

TABLE XIV

STEPWISE DISCRIMINANT ANALYSIS OF TWO GROUPS OF HIGH SCHOOL STUDENTS WHO ATTENDED OR DID NOT ATTEND THE UNIVERSITY

Step Number	Variable Entered	F to Enter	Number Included	Wilks' Lambda	Rao's V	Change in Rao's V
1	Preparation for Specific Style of Life	5.65	1	0.78	17.11	6.74 *
2	Influence of High School Teachers	4.43	2	0.72	23.01	5.90 *
3	Influence of Parents	3.45	3	0.68	28.03	5.02 *
4	Ability to Overcome Problems	3.95	4	0.64	34.24	6.21 *
5	Influence of Friend's Plan	3.60	5	0.60	40.41	6.18 *
6	Personal Development	3.69	6	0.52	47.27	6.86 *
7	Seriousness of Attending Post-Secondary Institutions	4.29	7	0.48	54.64	8.45 *
8	Problem Getting the Desired Program of Study	5.18	8	0.43	65.85	11.21 *
9	Problems in Fulfilling Post-Secondary Plans	6.23	9	0.39	81.07	15.22 *
10	School Counsellor's Influence	4.56	10	0.35	93.69	12.62 *
11	Problem of Personal Savings	5.96	11	0.32	112.02	18.33 *
12	Skills Development for Community Affairs	3.73	12	0.29	125.13	13.10 *
13	Sports/Athletic Involvement	4.33	13	0.27	141.86	16.73 *
14	Educational Aspirations	4.88	14	0.25	162.81	20.95 *
15	Acceptance at Desired University or College	3.63	15	0.26	180.39	17.59 *
16	Intellectual Development	2.26	16	0.24	186.56	10.36 *
17	Parental or Other Family Aid	2.18	17	0.23	198.01	11.45 *
18	Convenient Housing with Family	1.01	18	0.23	203.66	5.65 *
19	Number of Problems in Obtaining Goals	1.49	19	0.22	212.44	8.78 *

* sig. at .05 or better

TABLE XV

INFLUENCE OF PEOPLE ON STUDENTS' POST-SECONDARY DECISION
BY GEOCODE REGIONS (FIRST CHOICE BRANDON UNIVERSITY)
(In Percentage)

Geocode Region	Friends	Parents	Other Relatives	High School Teacher	Counsellor	College or University Student	College or University Representative	Religious Leader	Employer Met
North Central	28.7	47.2	14.6	12.5	9.4	17.1	3.2	6.9	21.1
South Central	32.4	58.4	15.8	11.7	5.7	17.2	7.8	8.2	21.2
Southwest	28.5	64.0	19.6	14.7	16.6	22.6	9.6	6.2	19.4
Parklands	23.9	60.6	19.3	13.0	13.0	22.8	9.0	4.2	18.2
North	26.1	61.0	15.8	25.0	17.6	16.8	6.1	3.4	18.7

TABLE XVI

INFLUENCE OF HIGH SCHOOL COUNSELLORS ON POST-SECONDARY PLANS
1972 - 1977 URBAN - RURAL

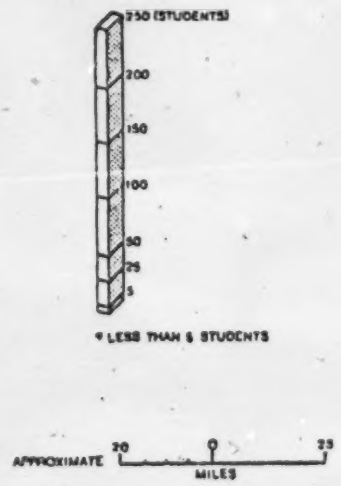
	No Influence	Little Influence	3	4	5	6	Major Influence
			(In Percentage)				
Urban	50.7	17.4	10.4	9.0	7.0	2.7	2.9
Rural	55.4	17.5	9.6	7.3	5.8	3.0	1.5

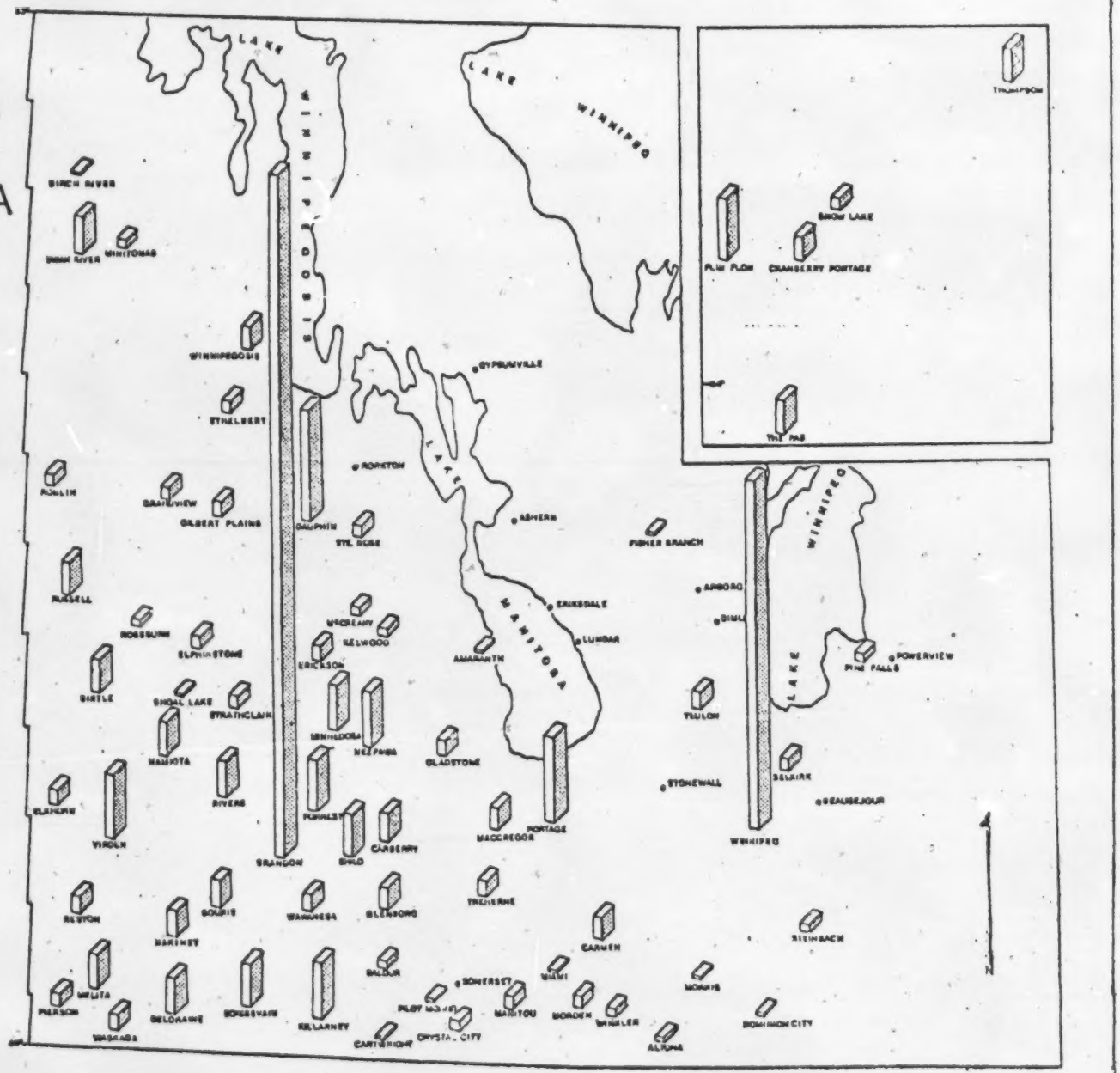
FIGURE I GEOGRAPHIC ORIGINS MAP I

BRANDON UNIVERSITY

LAST MANITOBA HIGH SCHOOL ATTENDED BY ENROLLED STUDENTS

1973-1978





SPACE BRANDON UNIVERSITY REGISTRAR'S OFFICE

TABLE

CORRELATION ANALYSIS OF ITEMS IN THE QUESTIONNAIRE -

	Strongest influencing person on immediate plans	Final decision	Experience which most impacted or could have changed future plans	Major activities Sept.-Dec.'78	Most difficult problem area	Resolution of problem to date	Educational Goal: To acquire a general well rounded education	Educational Goal: To develop critical intellectual skills for problem solving & learning	Educational Goal: To identify & develop personal interests, aptitudes & talents	Educational Goal: To discover vocational interests	Educational Goal: Prepare for immediate employment & careers after graduation	Education Goal: To meet academic requirements to enter graduate professional school	Educational Goal: To develop skills for leadership in community affairs	Educational Goal: Prepare for participation in social,
. Reasons for Not Attending Brandon University														
Insufficient money		0.68		0.26		-0.27								
Undecided what program to take	-0.28							-0.32					-0.21	-0.
Desired vocational program at Commun.College	0.34		-0.23		-0.22		-0.25		-0.31				-0.21	
Winnipeg & other universities had better course selection				-0.26					-0.24		-0.30			
Tired of school			0.25						0.23	0.28				
Too high unemployment rate of univ. grads.					0.27									
Poor atmosphere at Brandon University														
3. Reasons for Attending Brandon University														
Brandon U. close to home & cheaper		-0.27					0.29	0.37	0.26			0.26	0.32	
Brandon U. a smaller university		-0.23												
Brandon U. offered desired program of study						0.38								
Brandon U. has a friendly atmosphere														
Brandon University has better student/ faculty relationship		-0.21			0.24	0.29								
Influence of parents/teachers/friends to attend					0.26									

SIGNIFICANT FIGURES RECORDED ($S \leq 0.05$ OR BETTER)

Educational Goal: To develop a better understanding of society	Consideration of future enrolment at Brandon University	Date to attend Brandon Univ.	Program of studies planned	Highest level of education hoped to obtain	Career hoped to obtain	No. of major problems in attaining future goals	Insufficient money	Undecided what program to take	Desired vocational program at community college	Winnipeg & other universities had better course selection	Tired of school	Too high unemployment rate of university graduates	Poor atmosphere at Brandon University	Brandon University close to home and cheaper	Brandon University a smaller university	Brandon University offered desired program of study	Brandon University has a friendly atmosphere	Brandon University has better student/faculty relationship	Influence of parents/teacher/friends to attend
		0.24			0.25			0.37		-0.20		0.57	0.29	-0.29	-0.24			-0.22	
			0.20	-0.32		0.23	0.37							-0.27	-0.23	-0.20		-0.20	
	-0.25			-0.27							0.35			-0.27	-0.23	-0.20		-0.20	
				0.21			-0.21							-0.27	-0.23	-0.20		-0.20	
				-0.27				0.35					0.21						
							0.57												
							0.29				0.21	0.55							
0.23				0.34	0.23		-0.29	-0.27	-0.27	-0.27						0.38		0.28	
0.21						0.24	-0.24	-0.23	-0.23	-0.23							0.69	0.69	0.25
							-0.22	-0.21	-0.20	-0.20				0.38				0.23	
			0.21												0.69				
0.34				0.29	0.26	0.29	-0.22	-0.21	-0.20	-0.20				0.28	0.69	0.23	0.23		
			0.03												0.25				